UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

October 15, 2012

Michael J. Erickson. P.E.
SRI/FS Project Coordinator
ARCADIS – U.S. Inc.
10559 Citation Drive Suite 100
Brighton, Michigan 48116

Re: Draft Spring 2012 Bank Conditions Monitoring Report for the Former Plainwell Impoundment and Plainwell No. 2 Dam Area at the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site (August 2012)

Dear Mr. Erickson:

The United States Environmental Protection Agency (U.S. EPA), in consultation with the Michigan Department of Natural Resources (DNR), and Michigan Department of Environmental Quality (MDEQ) has reviewed the Spring 2012 Bank Monitoring Report for the Former Plainwell Impoundment and Plainwell No. 2 Dam Areas, and has the following comments:

Plainwell #1 Area

1. No significant issues of concern were identified upstream of US 131.

2. a) We observed some areas of continuing erosion in the former Plainwell Impoundment area that are between the US 131 bridge and the pipeline crossing that should be treated with rock. Specifically, RA 6B and 10A need to be addressed. These areas do not have stable banks and continue to erode. Given the constricted stream channel width, it is necessary to provide continuous rock protection along the water line and up the slope to the bankfull elevation (2-Year Storm Water Elevation). In addition, Georgia Pacific, LLC (Georgia Pacific) must replace the rock cover at RA 10B since we observed exposed liner in RA 10B during the joint visit on August 30, 2012.

   Corrective actions should occur as soon as possible. A stable slope and toe armoring will be necessary. We recommend that willow stakes and other tree or shrub plantings be placed in this reconstructed slope and if necessary, irrigated during July and August and other periods with abnormally dry conditions until the plantings are well established.

Rock used throughout should be appropriately sized and graded river rock or field stone to resist the erosive force.

To help in the planning process, we have attached a preliminary sketch for RA 10a. The sketch indicates that new rock will be placed beginning at a point upstream of the pipeline crossing, where the design rock terminates, to a point downstream of the pipeline crossing. The exact area will need to be confirmed in the field by the State, EPA, and Georgia Pacific.

b) In addition, the State believes that other areas, specifically RA 7B, 8B and 9B, within this reach (US 131 to the pipeline crossing), that have been previously armored with coir log and rock should also be supplemented to ensure rock is present up to the bankfull elevation due to the unstable river channel. These areas, if not addressed under the TCRA must be addressed under the Record of Decision.

3. The areas on the north side of the river (opposite RA 7B and RA 8B) that were not subject to removal action or treated with rock appear to be in good condition. No further action is needed in these areas.

4. We observed a substantial amount of the mid channel "prism" of former impoundment sediments just above the dam that has now become vegetated. Georgia Pacific should estimate the volume of his material, evaluate the sheer stress on the banks and determine if removal or induced movement of this material will substantially increase the cross-sectional area of the channel. Additionally, Georgia Pacific should evaluate whether the rock treatment is sufficient given the estimated bank sheer stress. Alternatively, Georgia Pacific could relocate the material this fall without further evaluation to the quiescent area below the spillway or dislodge the in-stream material and permit it to transport naturally with appropriate water quality monitoring.

5. The rock slope on the left bank (facing downstream) at the former dam powerhouse is slumping and should be corrected. This appears to have been caused by the 2008 storm event when a high volume of water was constricted over the temporary water control structure. A minor amount of rock relocation is required this fall. The rock placed at the top of the slope is not necessary now that water levels have dropped at this location and about 6' of rock can be stripped off the top and reused to cover exposed filter fabric and other necessary corrections. Appropriate vegetation will need to be established where rock is removed.

6. The 2012 Spring Bank Monitoring report can be corrected for those areas we observed in August that had been unvegetated in the Spring but have since become vegetated and should be rescored for BEHI ratings, (I2, J2) and describe

those sites that were evaluated in the field and determined not to require corrective measures (T3N, T4S, T11N and T12N).

Plainwell #2 Dam Area

1. Plainwell #2 dam area shows erosion where rock treatment terminates along the river banks. In a limited site visit, we observed this on the right descending bank near where the first staging area was located, but it may be present in other areas as well. We recommend installation of 1) soft engineering techniques, such as shrub and willow stake placement with anchored coir logs or anchored large woody debris, and 2) rock, as appropriate, to minimize bank erosion in those areas immediately adjacent to rock treatment that showed undercut banks during the site review. We believe this floodplain area does not need irrigation.

2. Information regarding treatment of purple loosestrife should be provided to the agencies to ensure performance measures are met regarding invasive species control. The agencies are supportive of using leaf-eating beetles (*Galerucella* sp.), but this approach may not be effective for small infestations, i.e. containing less than 100 plants (http://www.ncera125.ent.msu.edu/GuideGalerucella.htm).

If you have any questions regarding these comments, please contact me at (312) 886-4314.

Sincerely,

Ramon C. Mendoza
On-Scene Coordinator
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USEPA Region 5
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Attachment

CC: P. Buckholtz, MDEQ
J. Alfano , MDEQ
S.Hanshue, MDNR

ATTACHMENT: Preliminary Sketch RA 10a, Area where rock should be installed to prevent erosion.